



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,394	09/27/2003	Fred Hoffman	28679/05100	2393

24024 7590 07/08/2004

CALFEE HALTER & GRISWOLD, LLP  
800 SUPERIOR AVENUE  
SUITE 1400  
CLEVELAND, OH 44114

EXAMINER

GRAVINI, STEPHEN MICHAEL

ART UNIT PAPER NUMBER

3749

DATE MAILED: 07/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/605,394	HOFFMAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Stephen Gravini	3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☐ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 22 is considered indefinite because it is a dependent claim, which depends upon itself.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 9-13, 15-16, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Thomas (US 6,391,098). Thomas is considered to disclose the claimed assembly and method comprising:

an air dryer **24** including a manifold (please see column 3 line 45 wherein the disclosed air flow split is considered to anticipate the claimed manifold) and a desiccant cartridge **34**;

a bore **A1** or **A2** running through said manifold; and

Art Unit: 3749

a fastener, which includes a spin-on desiccant cartridge, disposed in said bore, wherein air flow passing through the air dryer intersects the bore and communicates to a purge volume (please see column 2 lines 42-47 wherein broad discussion of screw threaded pressure bearings for inlet and outlet modular pressure fittings is considered to imply the claimed bore fastener for airflow intersection) wherein said fitting is secured to a reservoir **50**;

optionally a means for preventing rotation of the air dryer when said air dryer is secured to the purge reservoir including a second fastener placed through a bore on an extension disposed on said manifold (again please see column 2 lines 42-47 wherein broad discussion of screw threaded pressure bearings for inlet and outlet modular pressure fittings is considered to imply the claimed rotation prevention means); or alternatively

delivering a flow of air to an air dryer manifold with a desiccant bed canister attached thereto (please see column 3 lines 16-29);

passing said flow of said air through the desiccant bed, thereby drying the air (please see column 3 lines 35-41);

delivering the dried air to a set of downstream components (please see column 4 lines 32-58);

purging the desiccant bed with purge volume to regenerate the a purge flow from a desiccant bed (please see column 3 lines 35-41); and

exhausting said purge flow after it has passed through said desiccant bed (please see column 4 line 31);

Art Unit: 3749

wherein said purge flow passes from via a bore in said manifold in which said purge volume a fastener securing said air dryer to the vehicle is disposed (please see column 2 lines 42-47 wherein broad discussion of screw threaded pressure bearings for inlet and outlet modular pressure fittings is considered to imply the claimed fastener for vehicle securing). Thomas is also considered to disclose the claimed stabilization and rotation prevention means including a bolt (please see column 2 lines 42-47 and the accompanying analysis discussed above in this rejection), two or more protruding arms **36** and **40**, commercial vehicle air brake system connection (column 1 line 3), and first and second passageways (column 4 lines 20-43).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 3749

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas. Thomas is considered to disclose the claimed invention, as discussed above in the anticipatory rejection, except for the claimed corresponding thread measurements. It would have been an obvious matter of design choice for one skilled in the art to claim the corresponding thread measurements, since it has not been specified that the claimed corresponding thread measurements provide any advantage over the prior art threaded correspondence discussed in primary reference Thomas.

Claims 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Shamine et al. (US 5,622,544). Thomas is considered to disclose the claimed invention, as discussed above in the anticipatory rejection, except for the claimed interlock or anti-rotation mechanism. Shamine is considered to disclose the claimed interlock or anti-rotation mechanism at column 5 lines 7-21 wherein the disclosed interlock function implies the claimed anti-rotation mechanism to prevent air dryer rotation, in the same manner and function as the claimed interlock. It would have been obvious for one skilled in the art to combine the teachings of primary reference Thomas with the teachings in secondary reference Shamine for the claimed interlock or anti-rotation mechanism for the propose of providing a secure fastener connection of an air dryer connection to its supporting housing.

Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas. It is assumed that claim 22 depends upon claim 21 rather than itself. Thomas is considered to disclose the claimed invention, as discussed above in the anticipatory rejection, except for the claimed mounting bracket to rail height ratio. It would have

Art Unit: 3749

been an obvious matter of design choice for one skilled in the art to claim the mounting bracket to rail height ratio, since it has not been specified that the claimed mounting bracket to rail height ratio provides any advantage over the mounting bracket to rail height ratio shown and implicitly discussed in primary reference Thomas.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 703 308 7570. The examiner can normally be reached on normal weekday business hours (east coast time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira S. Lazarus can be reached on 703 308 1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

smg

*Step Gravini*

July 2, 2004